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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
AZAD, ABUL K	

ART UNIT	PAPER NUMBER
2654	5

DATE MAILED: 03/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/822,617	LUCHAUP, DANIEL	
	Examiner	Art Unit	
	ABUL K. AZAD	2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *30 March 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-21* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *30 March 2001* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 2.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-21 are pending in this Office Action.

Information Disclosure Statement

2. The references cited in the Information Disclosure Statement, PTO-1449, Paper No. 2, have been considered.

Specification

3. The disclosure is objected to because of the following informalities: As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. However, the Specification contains section heading either under lined or bold typed.
Appropriate correction is required.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: GENERAL REMOTE CONTROL USING SPOKEN COMMANDS.

5. The disclosure is objected to because of the following informalities: The disclosure is objected to because it includes misleading terminology which differs from

that which is generally accepted in the art to which this invention pertains. While applicant may be his or her own lexicographer, a term is in a Specification or a claim may not be given a meaning repugnant to the usual meaning of that term. *See In re Hill,* 161 F.2d 367, 73 USPQ 482 (CCPA 1947). This misleading terminology is as follows:

The term "voice-recognition" is misused for what nowadays is called - - speech recognition- - in the speech processing art. While "voice-recognition" and "speech recognition" were both once used interchangeably to refer to spoken word recognition, nowadays the terms are distinguished. The term "voice recognition" now denotes identification of who is doing the speaking (class 704/246), while "speech recognition" (or "word recognition") denotes identification of what is being said (class 704/231 and 704/251). At paragraph 0002, the applicant himself acknowledges the term "speech recognition". So, appropriate correction to the proper terms of art is required.

Drawings

6. The drawing (Figure 1) is objected to under 37 CFR 1.83(a) because they fail to show appropriate descriptive legends for each element (i.e., remote control (10), host system (50)) as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown and clearly labeled in the drawing. MPEP § 608.02(d). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to because of the following informalities.

Figures 2A, 2C and 4, use misleading "voice-recognition" terminology for obtained - - speech recognition- -, discussed above under Specification; (element 15 of Figures 2A and 2C and element 73 of Figure 4 use misleading terminology "voice recognition).

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Objections

8. Claims 5, 7 and 8-14 are objected to because of the misleading use of "voice recognition". Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "voice recognition" in claims 8-14 is used by the claim to mean therefor "speech recognition", while the accepted meaning is "speech recognition."

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 1-11 and 15-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Knittel (US 6,606,280).

Regarding claim 1 Knittel teaches, "a voice-translating remote control comprising":

"a microphone operable to receive a voice command and output a voice signal" (Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

"an audio transmitter operably connected to the microphone to transmit an audio input signal to a host system based on the voice signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)");

"a signal receiver arranged to receive a command signal transmitted by the host system; and a signal transmitter operably connected to the signal receiver to transmit a control signal to an appliance based on the command signal" (col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which is turn sends those commands back to the target audio/video devices (appliance)").

Claim 2 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the signal transmitter is one selected from the group consisting of an infrared transmitter and a radio frequency transmitter" (col. 4, lines 8-22, particularly reads on "it contains a microphone, amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater).

Claim 3 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the audio transmitter transmits the audio input signal to the host system via wireless communication, and the host system transmits the command signal to the signal receiver via wireless communication" (col. 2, lines 7-12,

wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Claim 4 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a memory for storing appliance identity information" (col. 9, line 47 to col. 10, line 20, particularly reads on "upon detecting a match between incoming speech and characteristics of a spoken command, the control microprocessor is "pointed" to another address in RAM that stores digital information for each IR command to be transmitted, including device codes, and these are written by the microprocessor into buffer and driver circuitry for an IR transmitter"; here device codes are appliance identity information).

Claim 5 is set forth including the limitations of claim 4. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a voice-recognition processor for extracting appliance identification information from the voice signal" (col. 9, line 47 to col. 10, line 20, particularly reads on "upon detecting a match between incoming speech and characteristics of a spoken command, the control microprocessor is "pointed" to another address in RAM that stores digital information for each IR command to be transmitted, including device codes, and these are written by the microprocessor into buffer and driver circuitry for an IR transmitter").

Claim 6 is set forth including the limitations of claim 1. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a user interface" (col. 4, lines 1-11, a microphone to receive speech signal from user and col. 12, lines 37-47, a feedback audibly prompt is received via audio speaker are comprising a user interface).

Claim 7 is set forth including the limitations of claim 5. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a user interface" (col. 4, lines 1-11, a microphone to receive speech signal from user and col. 12, lines 37-47, a feedback audibly prompt is received via audio speaker are comprising a user interface).

Regarding claim 8, Knittel further teaches, "a voice-translating remote control system comprising":

"a host system comprising a host receiver, a voice-recognition processor, and a host transmitter, wherein the host receiver is operably connected to the voice-recognition processor, which is in turn operably connected to the host transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit"); and

"a remote control comprising a microphone operable to receive a voice command and output a voice signal, an audio transmitter operably connected to the microphone to

transmit an audio input signal to the host system based on the voice signal, a signal receiver arranged to receive a command signal transmitted by the host system, and a signal transmitter operably connected to the signal receiver to transmit a control signal to an appliance based on the command signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)" and col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which is turn sends those commands back to the target audio/video devices (appliance)").

Claim 9 is set forth including the limitations of claim 8. Knittel teaches those limitations as indicated there.

Knittel further teaches, "the remote control further comprising a user interface" (col. 4, lines 1-11, a microphone to receive speech signal from user and col. 12, lines 37-47, a feedback audibly prompt is received via audio speaker are comprising a user interface).

Claim 10 is set forth including the limitations of claim 8. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the audio transmitter transmits the audio input signal to the host system via wireless communication, and the host system transmits the command signal to the signal receiver via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Claim 11 is set forth including the limitations of claim 8. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the signal transmitter is one selected from the group consisting of an infrared transmitter and a radio frequency transmitter" (col. 4, lines 8-22, particularly reads on "it contains a microphone, amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater).

Regardind claim 15 Knittel teaches, "a voice-translating remote control comprising":

"a microphone to receive a voice command and output a voice signal" (Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

"a first transmitter means operably connected to the microphone for transmitting an audio input signal to a host system based on the voice signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)");

"a receiver means for receiving a command signal transmitted by the host system; and a second transmitter means operably connected to the receiver means for transmitting a control signal to an appliance based on the command signal" (col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which is turn sends those commands back to the target audio/video devices (appliance)").

Claim 16 is set forth including the limitations of claim 15. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising a user interface means for validating the command signal" (col. 12, lines 37-46, particularly reads on "the user can be audibly prompted of error and requested to enter the command learning mode").

Regarding claim 17 Knittel teaches, "a method for controlling an appliance using voice commands comprising":

"receiving a voice command by a microphone in a remote control and outputting a voice signal" (Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

"transmitting an audio input signal based on the voice signal to a host system comprising a host receiver, a speech-recognition processor, and a host transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit");

"processing the audio input signal by the speech-recognition processor to generate a command signal; transmitting the command signal to the remote control; receiving the command signal by the remote control; and wirelessly transmitting a control signal to the appliance based on the command signal" (col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver), which is turn sends those commands back to the target audio/video devices (appliance)").

Claim 18 is set forth including the limitations of claim 17. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein transmitting the audio input signal to the host system is via wireless communication and transmitting the command signal to the remote control is via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Claim 19 is set forth including the limitations of claim 17. Knittel teaches those limitations as indicated there.

Knittel further teaches, "further comprising validating the command signal received by the remote control" (col. 12, lines 37-46, particularly reads on "the user can be audibly prompted of error and requested to enter the command learning mode").

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

12. Claims 12-14, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knittel (US 6,606,280).

Regarding claim 12 Knittel teaches, "a voice-translating remote control system comprising":

"a host system comprising a host receiver, a voice-recognition processor, and a host transmitter, wherein the host receiver is operably connected to the voice-recognition processor, which is in turn operably connected to the host transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit"); and

"a remote control comprising a microphone operable to receive a voice command and output a voice signal, and an audio transmitter operably connected to the microphone to transmit an audio input signal to the host system based on the voice signal" (col. 4, lines 8-11, particularly reads on "it contains a microphone , amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater; and col. 8, lines 1-29, particularly reads on "this output is then provide to an RF modulator 162 which is then transmits audio which has been received at the microphone through an internal antenna 163 to the base unit (host system)").

Figures 1-8, does not explicitly teach the host system being capable of transmitting a control signal to an appliance. However, Figure 10, teaches the remote system and base unit a single-unit remote system, where recognized IR commands are directly wirelessly transmitted to the entertainment systems of interest. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to wirelessly transmit IR commands directly to the entertainment systems of interest from the base unit, without transmitting back to the remote unit, since base unit recognized

spoken command and produce associate IR command because one ordinary skill in the art would readily recognized that would provide better control the appliance by less distorted IR command signal and also provide quick action (less time to receive command by the appliances).

Claim 13 is set forth including the limitations of claim 12. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the audio transmitter transmits the audio input signal to the host system via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Figures 1-8, does not explicitly teach the host system transmits the control signal to the appliance via wireless communication. However, Figure 10, teaches the remote system and base unit a single-unit remote system, where recognized IR commands are directly wirelessly transmitted to the entertainment systems of interest. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to wirelessly transmit IR commands directly to the entertainment systems of interest from the base unit, since base unit recognized spoken command and produce associate IR command because one ordinary skill in the art would readily recognized that would provide better control the appliance by less distorted IR command signal and also provide quick action (less time to receive command by the appliances).

Claim 14 is set forth including the limitations of claim 12. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein the host transmitter is one selected from the group consisting of an infrared transmitter and a radio frequency transmitter" (col. 4, lines 8-22, particularly reads on "it contains a microphone, amplification and filtering circuitry and a radio frequency (RF) transmitter. It also has an IR receiver and transmitter, collectively called the IR repeater).

Regarding claim 20, Knittel teaches, "a method for remotely controlling an appliance using voice commands comprising":

"receiving a voice command by a microphone in a remote control and outputting a voice signal" (Fig. 2, element 45 a MIC to receive speech signal and deliver speech signal to device and base unit);

"transmitting an audio input signal based on the voice signal to a host system comprising a host receiver, a speech-recognition processor, and a host transmitter" (col. 4, lines 12-22, particularly reads on "it contains noise cancellation circuitry, a signal generator, a RF receiver, a speech recognition unit, a small computer and an IR receiver/transmitter pair("transceiver")"); "host system" reads on "base unit");

"processing the audio input signal by the speech-recognition processor to generate a command signal" (col. 10, lines 21-26, particularly reads on "the spoken command is recognized, the base unit 200 (host system) sends the associated IR command or commands via its IR transmitter 244 to the remote unit (a signal receiver),

which is turn sends those commands back to the target audio/video devices (appliance)").

Figures 1-8, does not explicitly teach, wirelessly transmitting the command signal from the host system to the appliance. However, Figure 10, teaches the remote system and base unit a single-unit remote system, where recognized IR commands are directly wirelessly transmitted to the entertainment systems of interest. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to wirelessly transmit IR commands directly to the entertainment systems of interest from the base unit, since base unit recognized spoken command and produce associate IR command because one ordinary skill in the art would readily recognized that would provide better control the appliance by less distorted IR command signal and also provide quick action (less time to receive command by the appliances).

Claim 21 is set forth including the limitations of claim 20. Knittel teaches those limitations as indicated there.

Knittel further teaches, "wherein transmitting the audio input signal to the host system via wireless communication" (col. 2, lines 7-12, wireless transmitter; and col. 4, lines 8-22, here RF and IR repeaters are wireless communication).

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Houser et al. (US 5,774,859) teach, information system having a speech interface.

Kuhn et al. (US 6,553,345) teach, universal remote control allowing natural language modality for television and multimedia searches and request.

Contact Information

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Abul K. Azad** whose telephone number is **(703) 305-3838.**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richemond Dorvil**, can be reached at **(703) 305-9645.**

Any response to this action should be mailed to:

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

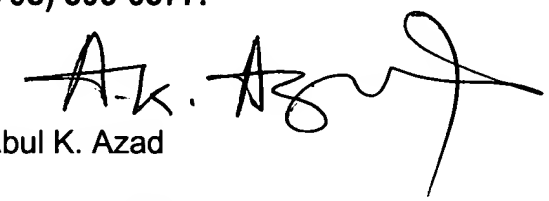
Or faxed to:

(703) 872-9314

(For informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be directed to the Technology Center's Customer Service Office at telephone number **(703) 306-0377.**



Abul K. Azad

March 8, 2004